



Ball 1-2-3
09/530,342

1731
#A/BM
8/4/2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Ball et al.

Serial No: 09/530,342

Filing Date: 4/27/00

Title: APPARATUS AND METHOD
FOR DRAWING WAVEGUIDE
FIBERS

Art Group Unit: 1731

Examiner: J. Hoffmann

RESPONSE

Assistant Commissioner for Patents
Washington, DC 20231

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TC 1700

RESPONSE TO THE EXAMINER'S FIRST OFFICE ACTION

In response to the Office Action dated 8/2/01, designated as Paper No. 5 in the above-captioned application, please enter the following amendments and Remarks as follows:

In the Drawings

Please insert the numeral 28 as shown in the marked-in-red drawing enclosed herewith.

In the Specification

Please replace the second full paragraph of page 6 with the following:

A¹
Housing 12, which is water cooled, may be fabricated of stainless steel or the like.
Preferably, housing 12 axially runs the full length of the muffle 28 to fully enclose the muffle.
An inert gas such as argon is flowed into the housing 12 to prevent oxidation of the outer surface of the muffle 28.

Please replace the third full paragraph of page 6 with the following:

A²
A waveguide fiber preform 32 (shown in phantom) is axially inserted into muffle 28 until a first end 34 thereof is positioned at the "hot zone" located within the induction coil 30. After hot zone has reached a temperature sufficient to draw fiber from the preform, which is preferably above 1900°C, an optical fiber 36 is drawn from the end portion 34 of the preform 32. In an important aspect of the invention, the inner surface of the muffle 28 adjacent the preform 32 has a coating of high purity silicon carbide thereon to prevent deterioration of the